

TRANSLATION

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>664763</b>	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. <b>PCT/JP2004/018406</b>	International filing date ( <i>day/month/year</i> ) <b>09.12.2004</b>	Priority date ( <i>day/month/year</i> ) <b>09.12.2003</b>
International Patent Classification (IPC) or national classification and IPC <b>H01J65/00, G02F1/13357</b>		
Applicant <b>MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.	
2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.	
3. This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> ( <i>sent to the applicant and to the International Bureau</i> ) a total of <u>6</u> sheets, as follows: <input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> ( <i>sent to the International Bureau only</i> ) a total of (indicate type and number of electronic carrier(s))  _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).	
4. This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application	
Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/018406

Box No. I

Basis of the report

1. With regard to the
- language**
- , this report is based on:



the international application in the language in which it was filed



the translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of:



international search (Rule 12.3(a) and 23.1(b))



publication of the international application (Rule 12.4(a))



international preliminary examination (Rule 55.2(a) and/or 55.3(a))

2. With regard to the
- elements**
- of the international application, this report is based on (
- replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*
- ):



the international application as originally filed/furnished



the description:

pages 1, 4-32 as originally filed/furnishedpages\* 3, 3/1 received by this Authority on 06.06.2005pages\* 2 received by this Authority on 03.03.2006

the claims:

nos. 4 as originally filed/furnished

nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19

nos.\* 2, 3, 5-18 received by this Authority on 06.06.2005nos.\* 1 received by this Authority on 03.03.2006

the drawings:

sheets fig. 1-44 as originally filed/furnished

sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_



a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

- 3.
- ☐
- The amendments have resulted in the cancellation of:



the description, pages \_\_\_\_\_



the claims, nos. \_\_\_\_\_



the drawings, sheets/figs \_\_\_\_\_

the sequence listing (*specify*): \_\_\_\_\_any table(s) related to sequence listing (*specify*): \_\_\_\_\_

- 4.
- ☐
- This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).



the description, pages \_\_\_\_\_



the claims, nos. \_\_\_\_\_



the drawings, sheets/figs \_\_\_\_\_

the sequence listing (*specify*): \_\_\_\_\_any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/018406

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																					
1. Statement	<table><tbody><tr><td rowspan="2">Novelty (N)</td><td>Claims</td><td><u>1-18</u></td><td>YES</td></tr><tr><td>Claims</td><td><u></u></td><td>NO</td></tr><tr><td rowspan="2">Inventive step (IS)</td><td>Claims</td><td><u>9-16</u></td><td>YES</td></tr><tr><td>Claims</td><td><u>1-8, 17, 18</u></td><td>NO</td></tr><tr><td rowspan="2">Industrial applicability (IA)</td><td>Claims</td><td><u>1-18</u></td><td>YES</td></tr><tr><td>Claims</td><td><u></u></td><td>NO</td></tr></tbody></table>	Novelty (N)	Claims	<u>1-18</u>	YES	Claims	<u></u>	NO	Inventive step (IS)	Claims	<u>9-16</u>	YES	Claims	<u>1-8, 17, 18</u>	NO	Industrial applicability (IA)	Claims	<u>1-18</u>	YES	Claims	<u></u>	NO
Novelty (N)	Claims		<u>1-18</u>	YES																		
	Claims	<u></u>	NO																			
Inventive step (IS)	Claims	<u>9-16</u>	YES																			
	Claims	<u>1-8, 17, 18</u>	NO																			
Industrial applicability (IA)	Claims	<u>1-18</u>	YES																			
	Claims	<u></u>	NO																			
2. Citations and explanations (Rule 70.7)	<p>Document 1: JP 2003-317669 A (Uesuto Denki Kabushiki Kaisha), 07 November 2003</p> <p>Document 2: JP 2000-277056 A (Toshiba Lighting &amp; Technology Corp.), 06 October 2000</p> <p>Document 3: JP 2000-162593 A (Hitachi, Ltd.), 16 June 2000</p> <p>Document 4: JP 10-64478 A (Kabushiki Kaisha Erebamu), 06 March 1998</p> <p>Claims 1 to 7</p> <p>The inventions set forth in claims 1 to 7 do not involve an inventive step in the light of document 4 cited in the international search report.</p> <p>Document 4 discloses a light source device with a structure similar to the structure set forth in claims 1 to 7 (i.e., a structure wherein the dielectric member also serves as a holding member, and in cases when the electrode layer is formed over the entire surface in the axial direction of the tube, the dielectric member is positioned at a site corresponding to the location of the internal electrode while a space is formed between the external electrode and the bulb in the other sections) (refer to paragraph [0016], the drawings and the like).</p>																					

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/018406

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	<p>Claims 1 to 7, 17 and 18</p> <p>The inventions set forth in claims 1 to 7, 17 and 18 do not involve an inventive step in the light of documents 1 and 3 cited in the international search report.</p> <p>Document 1 discloses a light source device with a structure that is more or less similar to the structure set forth in claims 1 to 7, 17 and 18 (i.e., a structure wherein the dielectric member also serves as a holding member, although said structure differs in that the dielectric member is not formed across the entire surface in the axial direction of the tube) (refer to the "Embodiments of the Invention," the drawings, paragraph [0045] and the like).</p> <p>In addition, increasing the uniformity of the illumination distribution, as disclosed in document 1, is merely one example of the various ways in which the illumination distribution may be adjusted, and it is clearly possible to apply the technique for making localized changes in the thickness of the dielectric member in order to obtain any desired illumination distribution, not just a uniform illumination distribution. In addition, document 3 describes a structure wherein the external electrode is separated from the bulb so that there is a space therebetween (refer to paragraph [0143] and fig. 14(c)). Such being the case, it cannot be considered to be especially difficult to configure a structure like the structure set forth in claims 1 to 7, 17 and 18 by eliminating portions of the dielectric member of the invention disclosed in document 1 in a localized manner in order to adjust the illumination intensity thereof. Furthermore, if the arrangement (interval) is such that discharge is possible, then it is</p>

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

thought that the resulting invention will be capable of satisfying the numerical ranges set forth in claim 2.

#### Claim 8

The invention set forth in claim 8 does not involve an inventive step in the light of documents 1 to 3 cited in the international search report.

Document 1 indicates that it is possible to configure so that the dielectric constant of the dielectric member is lower than the dielectric constant of the glass material that constitutes the bulb (refer to paragraph [0028] and the like).

Meanwhile, document 2 indicates that it is possible to use a glass material with a relative dielectric constant of 5.1 in the bulb of a lamp similar to the light source device disclosed in document 1 (refer to paragraph [0116], the drawings and the like).

Moreover, the dielectric constant of the dielectric material in an invention obtained by combining the inventions disclosed in documents 1 to 3 will be 5.1 or less; therefore, it is thought that the invention in question will be capable of partially satisfying the numerical ranges set forth in claim 8.

#### Claims 9 to 16

The inventions set forth in claims 9 to 16 are not disclosed in any of the documents that are cited in the international search report, and would not have been obvious to a person skilled in the art.